

ABSTRACT

A membrane process for the removal of sulfur species from a naphtha feed, in particular, a FCC light cat naphtha, without a substantial loss of olefin yield is disclosed. The process involves contacting a naphtha feed stream with a membrane having sufficient
5 flux and selectivity to separate a sulfur deficient retentate fraction from a sulfur enriched permeate fraction, preferably, under pervaporation conditions. Sulfur deficient retentate fractions are useful directly into the gasoline pool. Sulfur-enriched permeate fractions are rich in sulfur containing aromatic and nonaromatic hydrocarbons and are further treated with conventional sulfur removal technologies, e.g. hydrotreating, to reduce sulfur content.

- 10 The process of the invention provides high quality naphtha products having a reduced sulfur content and a high content of olefin compounds.